In the Specification:

Please amend paragraph 0007 as follows:

[0007] An efficient cellular system should enjoy a frequency reuse factor equal to one, meaning that all the available bandwidth is used in every cell. Such an implementation reduces the signal-to-noise ~~signal-o noise~~ ratio (SNR) of the users closer to the edge, or border, of each cell. For these mobile terminals at or near the border of adjacent cells, the desired signal from a servicing base station has almost the same power as the signals transmitted from the neighboring base stations, since the distances of the mobile terminal from the base stations are almost equal. If the interference is treated as noise, this low SINR limits the data rate that can be provided to these remote units. Because of the fairness factor of the system, admission of these mobile terminals into the system will limit maximum through-put. Hence, even those mobile terminals enjoying strong SINR will be penalized. The result is a highly inefficient system.

Please amend paragraph 0051 as follows:

[0051] The STC decoder 64 effectively decodes the incoming symbol streams to recover the originally transmitted symbols. Again, it is assumed that all base stations 10 are synchronized to the same clock. Following the FFT processing, the k-th output of the FFT processors 60 of the receive chain j for the mobile terminal is represented by:

Eq. 8 $$r_{k,j}(t)=\sum_{i=1}^{n}\alpha_{i,j,B_l}(t)c_{k,i,B_l}(t)+\sum_{B_r}\sum_{i+1}^{n}\alpha_{i,j,B_r}(t)c_{k,i,B_r}(t)+\eta_{k,j}(t)$$

where base station B_l runs in the set of all the neighboring base stations. In particular,

Eq. 9

$$r_{k,j}(0)=\alpha_{1,j,B_l}(0)s_{k,1,B_l}(0)+\alpha_{2,j,B_l}(0)s_{k,2,B_l}(0)+\sum_{B_r}\left(\alpha_{1,j,B_r}(0)s_{k,1,B_r}(0)+\alpha_{2,j,B_r}(0)s_{k,2,B_r}(0)\right)+\eta_{k,j}(0)$$

and

[[EQ]] Eq. 10

$$r_{k,j}(T)=-\alpha_{1,j,B_l}(T)s^{*}_{k,2,B_l}(0)+\alpha_{2,j,B_l}(T)s^{*}_{k,1,B_l}(0)+\sum_{B_r}\left(-\alpha_{1,j,B_r}(T)s^{*}_{k,2,B_r}(0)+\alpha_{2,j,B_r}(T)s^{*}_{k,1,B_r}(0)\right)+\eta_{k,j}(T)$$